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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/564,148	11/09/2006	Malgorzata Konieczna	GRT/37-86	6122

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EXAMINER	
VU, JAKE MINH	
ART UNIT	PAPER NUMBER
1618	
MAIL DATE	DELIVERY MODE
09/22/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/564,148	KONIECZNA ET AL.	
	Examiner	Art Unit	
	Jake M. Vu	1618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 June 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-11 and 15-20* is/are pending in the application.

4a) Of the above claim(s) *15-17* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-11 and 18-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Receipt is acknowledged of Applicant's Request for Continued Examination and Amendment filed on 06/15/2009.

- Claim 1 has been amended.
- Claim 20 has been added.
- Claims 12-14 have been previously cancelled.
- Claims 1-11 and 15-20 are pending in the instant application.
- Claims 15-17 have been previously withdrawn from consideration.

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 06/15/2009 has been entered.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-11 are rejected under 35 U.S.C. 102(b) as being anticipated by MITRA et al (US 5,955,105) as evidenced by HANDBOOK (Handbook of Pharmaceutical Excipients: 5th edition. pg. 134, 725 and 731 (2006)) and MSDS (Material Safety Data Sheet: L-Thyroxine, sodium salt) **are withdrawn** in view of Applicant's amendment.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-11 and 18-20 rejected under 35 U.S.C. 103(a) as being unpatentable over MITRA et al (US 5,955,105) as evidenced by HANDBOOK (Handbook of Pharmaceutical Excipients: 5th edition. pg. 134, 725 and 731-732 (2006)) and MSDS (Material Safety Data Sheet: L-Thyroxine, sodium salt) in view of EUROPEAN (European Pharmacopoeia (2002) pg. 1438) and FRANZ et al (US 2003/0032675) **are maintained** for reasons of record in the previous office action filed on 09/05/2008, 03/13/2009 and as discussed below.

Note, the limitations of "wherein the pregelatinised starch is produced by subjecting moistened starch to mechanical pressure in order to rupture some or all of its starch granules and subsequent drying" and "pregelatinised starch contains about 5% free amylase, 15% free amylopectin, and 80% unmodified starch" are inherent to the

pregelatinised starch (see European Pharmacopoeia at pg. 1438; Handbook of Pharmaceutical Excipients: 5th edition at pg. 731).

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.,* 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). In this instance, Applicant argues that FRANZ did not discuss the nature of the excipients used in the levothyroxine sodium tablets, nor the amounts of excipients, nor how such excipients can affect the stability and disintegration characteristics of the tablets. Moreover, no evidence was presented that it would have been obvious to modify the formulation in Example 10 of MITRA by using the specific excipients of FRANZ's specific formulation in claim 6 with a reasonable expectation of success. The Examiner finds this argument unpersuasive, because FRANZ is a secondary reference, as discussed in the previous office action, to show that the prior art had used pregelatinized starch with levothyroxine, wherein pregelatinized starch is simply a functional equivalent excipient alternative; thus, there would be a reasonable expectation of success when the references are combine.

Applicant argues that one of ordinary skill in the art would also have had no reason to use MITRA's Example 10 as the starting point for modifying a pharmaceutical formulation because neither stability nor dissolution data were provided as reference points to determine improvement. The Examiner finds this argument unpersuasive,

because as discussed above, pregelatinized starch is simply a functional equivalent excipient alternative of starch, in which these two excipients are used interchangeably in the art. Applicant provides no unexpected result comparing a levothyroxine composition containing starch as compared to a levothyroxine composition containing pregelatinized starch. Additionally, Applicant's unexpected result is attributed to microcrystalline cellulose and not pregelatinized starch (see pg. 7, line 33-35).

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., water content of 4.1% or 4.7%) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Applicant argues that one of ordinary skill in the art starting from MITRA's formulations and modifying them by replacing MITRA's water-soluble glucose polymer (e.g., unmodified starch in Example 10) with FRANZ's pregelatinised starch would not have predicted that this change would have resulted in the surprising (and totally unexpected) property that the resultant formulations display increasing stability with higher moisture content. As was discussed above, this is a complete reversal of the property of MITRA's formulations which display increasing stability with lower, almost minimal, moisture content. The property of Applicants' claimed pharmaceutical formulations having greater stability at higher moisture content has a number of advantages in terms of being able to control adjustment of the moisture content in order

to select specific stability characteristics. The Examiner finds this argument unpersuasive, because none of Applicant's unexpected results were attributed to the change from starch to pregelatinized starch.

Telephonic Inquiries

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jake M. Vu whose telephone number is (571)272-8148. The examiner can normally be reached on Mon-Tue and Thu-Fri 8:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Hartley can be reached on (571) 272-0616. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jake M. Vu/
Primary Examiner, Art Unit 1618